

Installation for Safe and Efficient Operation

The oscilloscope will operate to its specifications if the operating environment is maintained within the following parameters:

Operating Environment



- Temperature 5 to 40 °C (41 to 104 °F) rated.
- Humidity..... Maximum relative humidity 80 % RH (non-condensing) for temperatures up to 31 °C decreasing linearly to 50 % relative humidity at 40 °C
- Altitude..... < 2000 m (6560 ft)

The oscilloscope has been qualified to the following EN61010-1 category:

- Protection Class I
- Installation (Overvoltage) Category..... II
- Pollution Degree..... 2






Safety Symbols

Where the following symbols or indications appear on the instrument's front or rear panels, or elsewhere in this manual, they alert the user to an aspect of safety.

Symbol	Meaning
	CAUTION: Refer to accompanying documents (for Safety-related information). <i>See elsewhere in this manual wherever the symbol is present, as indicated in the Table of Contents.</i>
	CAUTION: Risk of electric shock.
	On (Supply).



Installation and Safety

Symbol	Meaning
	Off (Supply)
	Earth (Ground) Terminal
	Protective Conductor Terminal
	Chassis Terminal
	Earth (Ground) Terminal on BNC Connectors
WARNING	Denotes a hazard. If a WARNING is indicated on the instrument, do not proceed until its conditions are understood and met.



WARNING

Any use of this instrument in a manner not specified by the manufacturer may impair the instrument's safety protection. The oscilloscope has *not* been designed to make direct measurements on the human body. Users who connect a LeCroy oscilloscope directly to a person do so at their own risk. Use only indoors.



Power Requirements

The oscilloscope operates from a 115 V (90 to 132 V) or 220 V (180 to 250 V) AC power source at 45 Hz to 66 Hz.

No voltage selection is required, since the instrument automatically adapts to the line voltage present.

Fuses

The oscilloscope's power supply is protected against short-circuit and overload by means of two "T"-rated fuses of type according to scope model:

- **6.3 A/250 V AC** **9344C, 9350C, 9354C, 9370C, 9374C, 9384C Series**
- **5 A/250 V AC** **9304C, 9310C, 9314C Series.**

The fuses are located above the mains plug. Disconnect the power cord before inspecting or replacing a fuse. Open the fuse box by inserting a small screwdriver under the plastic cover and prying it open. For continued fire protection at all line voltages, replace only with fuses of the specified type and rating (*see above*).

Ground

The oscilloscope has been designed to operate from a single-phase power source, with one of the current-carrying conductors (neutral conductor) at ground (earth) potential. Maintain the ground line to avoid an electric shock. None of the current-carrying conductors may exceed 250 V rms with respect to ground potential. The oscilloscope is provided with a three-wire electrical cord containing a three-terminal polarized plug for mains voltage and safety ground connection. The plug's ground terminal is connected directly to the frame of the unit. For adequate protection against electrical hazard, this plug must be inserted into a mating outlet containing a safety ground contact.

Cleaning and Maintenance

Maintenance and repairs should be carried out exclusively by a LeCroy technician (*see Chapter 1*). Cleaning should be limited to the exterior of the instrument only, using a damp, soft cloth. Do not use chemicals or abrasive elements. Under no circumstances should moisture be allowed to penetrate the oscilloscope. To avoid electric shocks, disconnect the instrument from the power supply before cleaning.



Risk of electrical shock: No user-serviceable parts inside. Leave repair to qualified personnel.

Power On

Connect the oscilloscope to the power outlet and switch it on by pressing the power switch located on the rear panel. After the instrument is switched on, auto-calibration is performed and a test of the oscilloscope's ADCs and memories is carried out. The full testing procedure takes approximately 10 seconds, after which time a display will appear on the screen.